

# **SOUTH BROADWAY BRIDGE AT 34<sup>TH</sup> STREET SOUTH**



# BROADWAY BRIDGE @ 34<sup>TH</sup> STREET SOUTH



BROADWAY

MACARTHUR ROAD

UNION PACIFIC RAILROAD






31ST STREET SOUTH

Arkansas River



Garvey Park



# HISTORICAL DATA

-  **BRIDGE BUILT IN 1938**
-  **SEVERAL REHABILITATIONS OVER THE YEARS**
-  **EMERGENCY CLOSURE AND REPAIR IN AUGUST 2007**
-  **CURRENT SUFFICIENCY RATING = 42.3 (100PT SCALE)**
  -  **SECOND LOWEST RATING OF ANY BRIDGE IN OUR SYSTEM (250+ BRIDGES)**

# BACKGROUND

-  **DESIGN CONTRACT WITH MKEC IN JULY 2009**
-  **MARCH 29, 2010: HELD NEIGHBORHOOD MEETING TO DISCUSS PROJECT OPTIONS.**
-  **APRIL 28, 2010: HELD MEETINGS WITH SOUTH END PROPERTY OWNERS.**
-  **MAY 5, 2010: DAB III RECOMMENDED APPROVAL OF WEST ALIGNMENT WITH OPTION TO EXTEND TOPEKA ST SOUTH TO PROVIDE APPROPRIATE ACCESS TO LOCAL BUSINESSES.**
-  **AUGUST 24, 2010: PRESENTATION OF CONCEPTS TO CITY COUNCIL WORKSHOP**

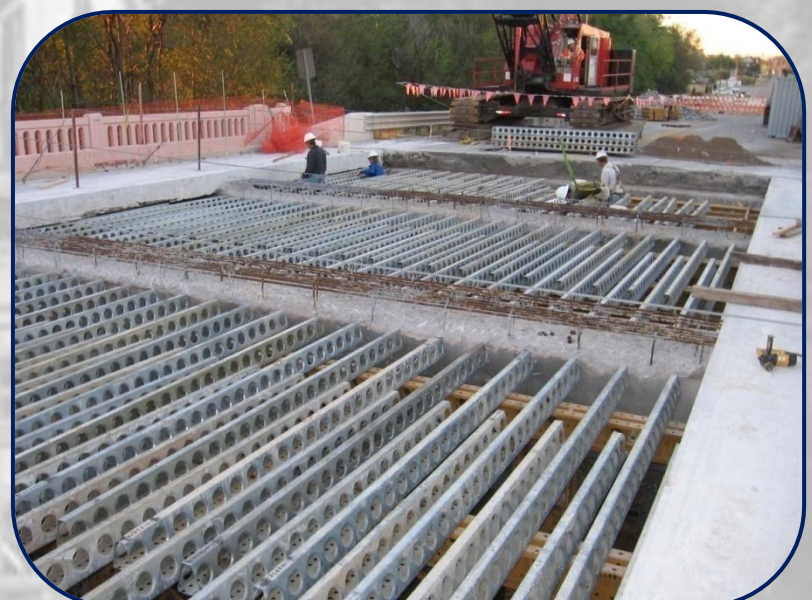


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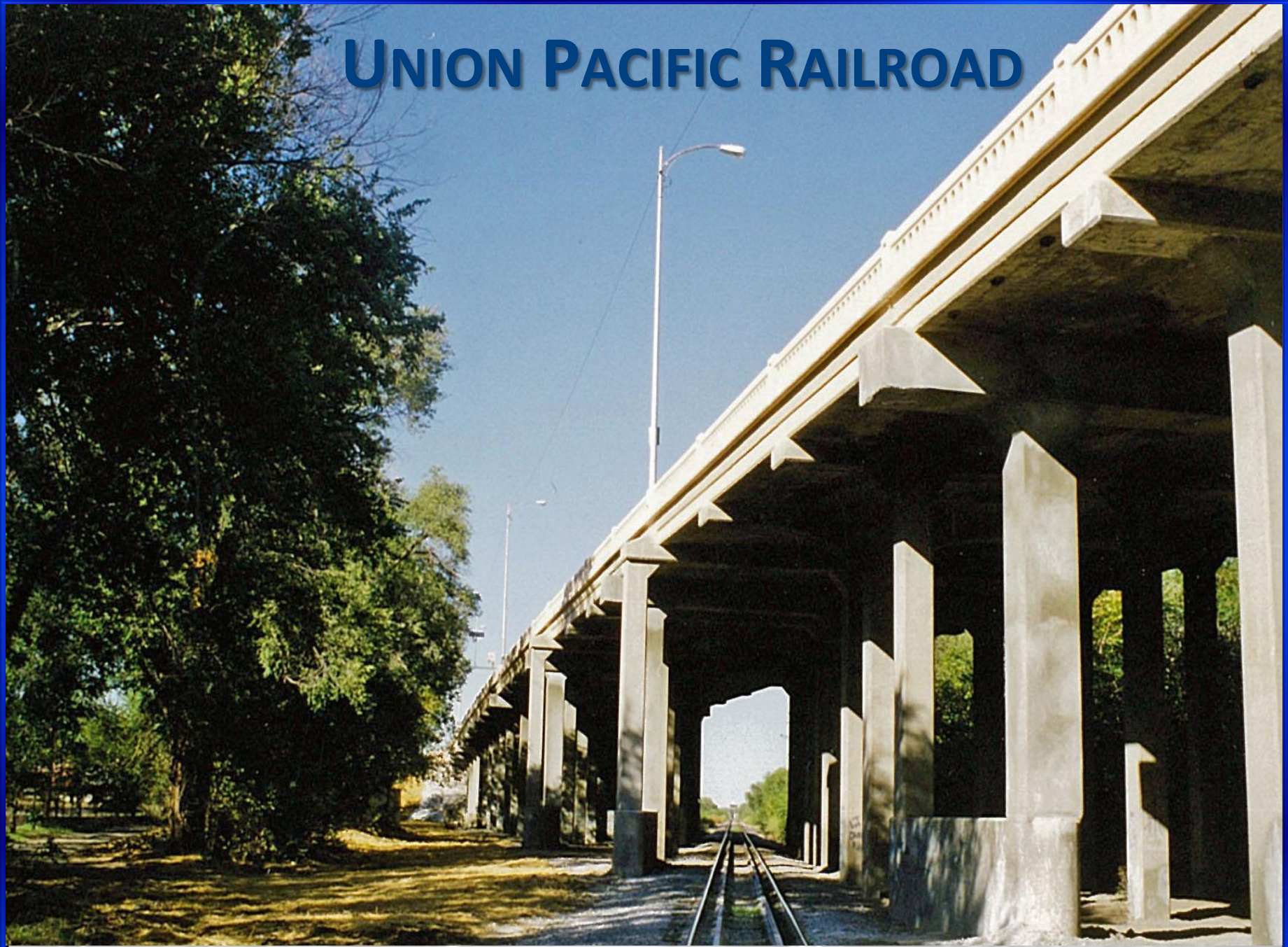


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# UNION PACIFIC RAILROAD







Possible Historic

 Structure on City  
Historic Register

**ESTIMATED COST:**

CONSTRUCTION:	\$21,000,000
RIGHT-OF-WAY:	\$1,800,000
	<u>\$22,800,000</u>

**ESTIMATED BROADWAY CLOSURE TIME:**  
**11-13 MONTHS**

**STRAIGHT  
ALIGNMENT 'A'**

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67208  
316-684-8600





 Structure on City  
Historic Register

**ESTIMATED COST:**  
CONSTRUCTION: \$22,800,000  
RIGHT-OF-WAY: \$1,100,000  
\$23,900,000

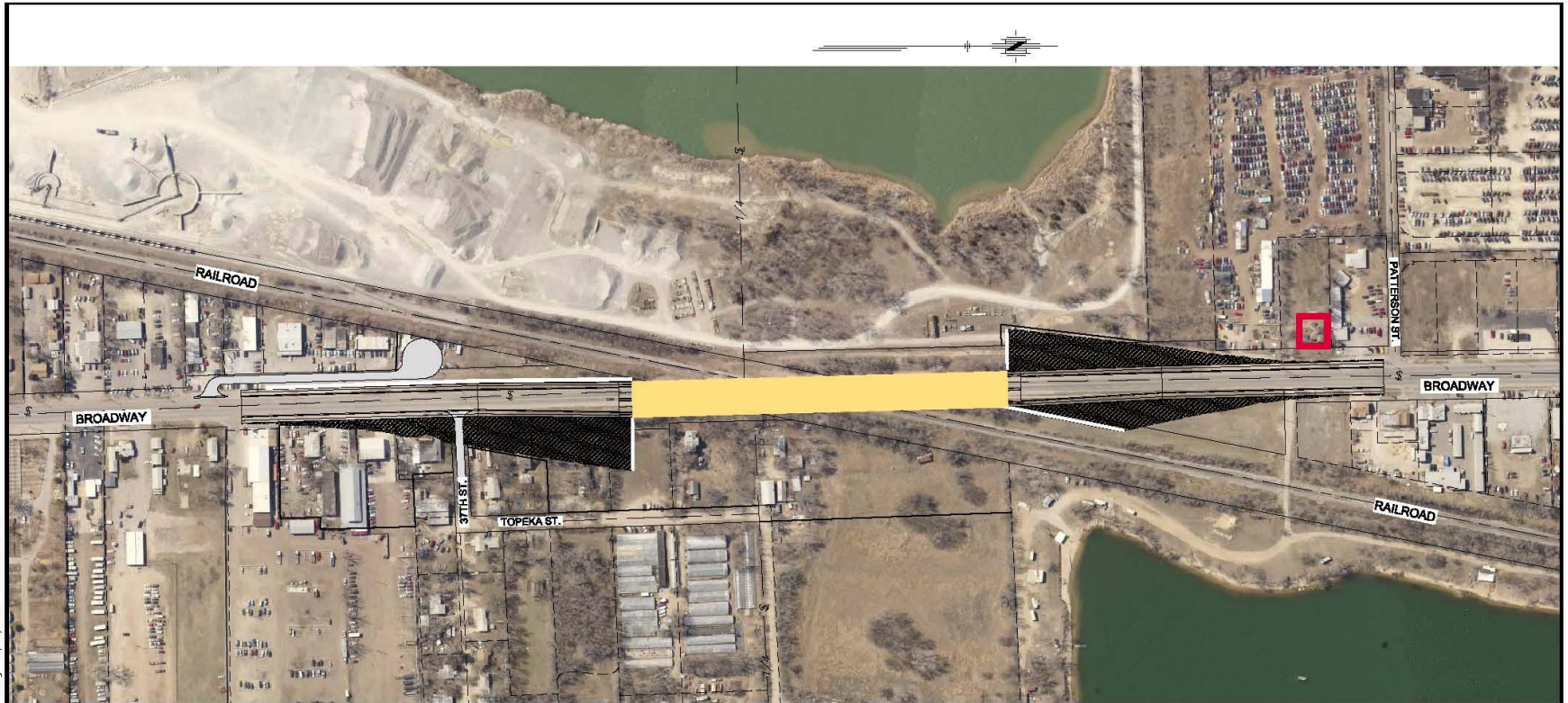
**ESTIMATED BROADWAY CLOSURE TIME:**  
13-15 MONTHS

**STRAIGHT  
ALIGNMENT 'B'**

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WIER ROAD  
WICHITA, KS. 67206  
316-684-9600



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 Structure on City  
Historic Register

**ESTIMATED COST:**  
CONSTRUCTION: \$20,200,000  
RIGHT-OF-WAY: \$1,200,000  
\$21,400,000

**ESTIMATED BROADWAY CLOSURE TIME:**  
**2-3 MONTHS**

**STRAIGHT ALIGNMENT 'C'** MKEC  
**Steel Box Arch**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-844-8600





 Structure on City  
Historic Register

### ESTIMATED COST:

CONSTRUCTION:	\$10,100,000
RIGHT-OF-WAY:	\$1,100,000
	<b>\$11,200,000</b>

ESTIMATED BROADWAY CLOSURE TIME:  
7-8 MONTHS

**EAST  
ALIGNMENT 'A'**

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, K.S. 67206  
316-644-9600





 Structure on City  
Historic Register

**ESTIMATED COST:**

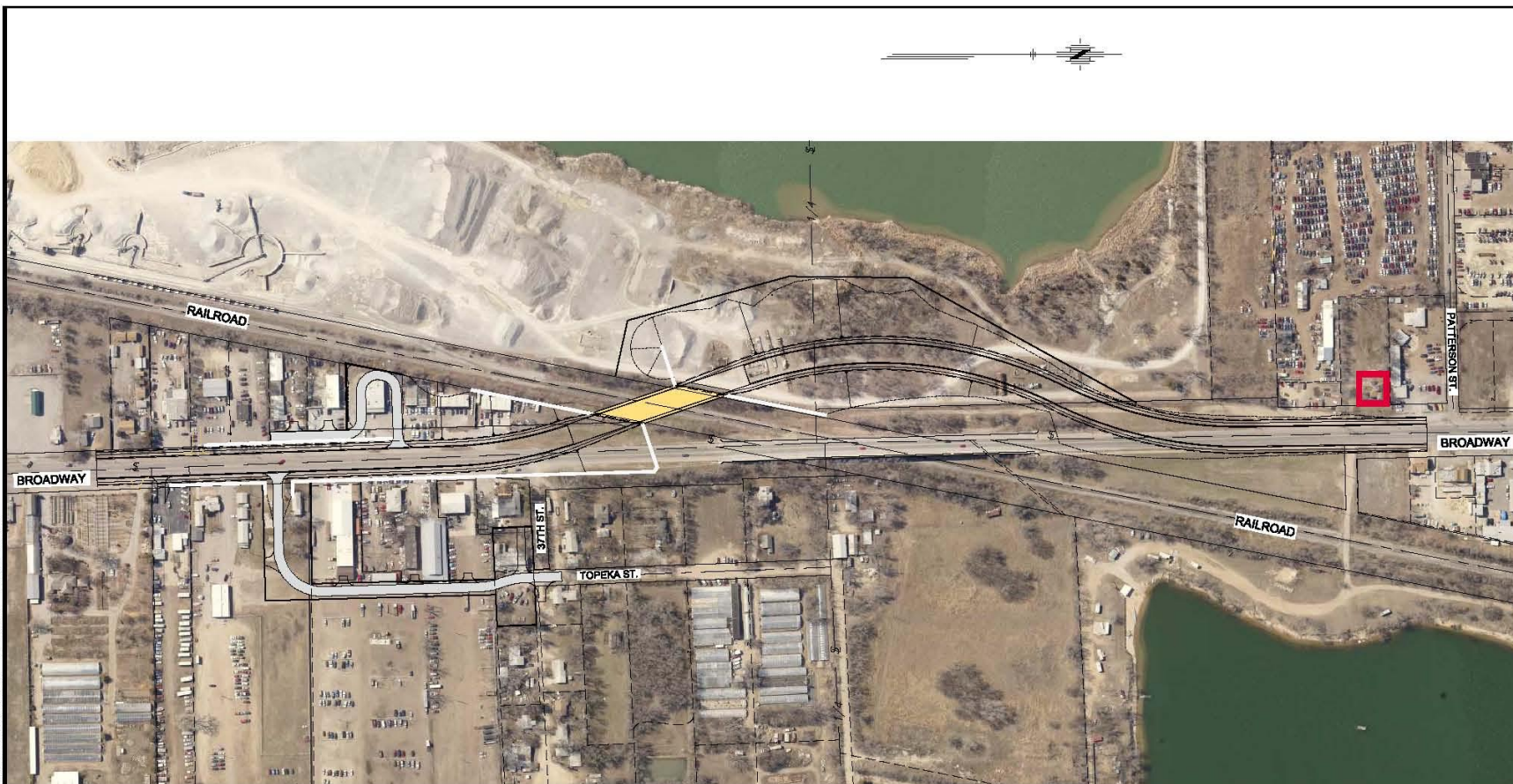
CONSTRUCTION:	\$10,100,000
RIGHT-OF-WAY:	\$3,100,000
	<b>\$13,200,000</b>

**ESTIMATED BROADWAY CLOSURE TIME:**  
**4-5 MONTHS**

**EAST ALIGNMENT 'B'**  
**Single Span**

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS 67206  
316-684-9600





 Structure on City  
Historic Register

**ESTIMATED COST:**  
CONSTRUCTION: \$11,500,000  
RIGHT-OF-WAY: \$2,000,000  
\$13,500,000

**ESTIMATED BROADWAY CLOSURE TIME:**  
7-8 MONTHS

**WEST  
ALIGNMENT 'A'**

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WERN ROAD  
WICHITA, KS. 67206  
316-664-9908





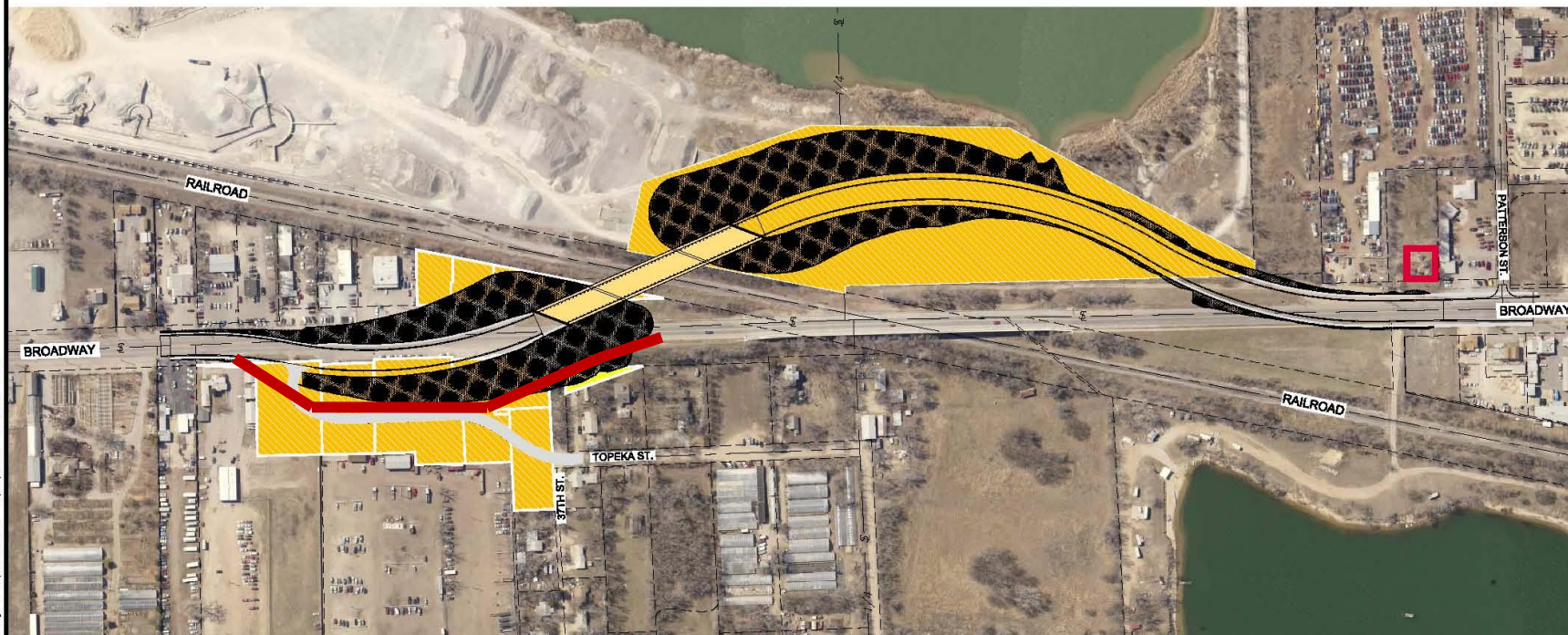
 Structure on City  
Historic Register

**ESTIMATED COST:**  
CONSTRUCTION: \$10,100,000  
RIGHT-OF-WAY: \$4,000,000  
\$14,100,000

**ESTIMATED BROADWAY CLOSURE TIME:**  
2-3 MONTHS

**WEST ALIGNMENT 'B' MKEC**  
SINGLE SPAN  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-844-7400





Commercial/Industrial Property Acquisition  
Residential Property Acquisition

Structure on City  
Historic Register

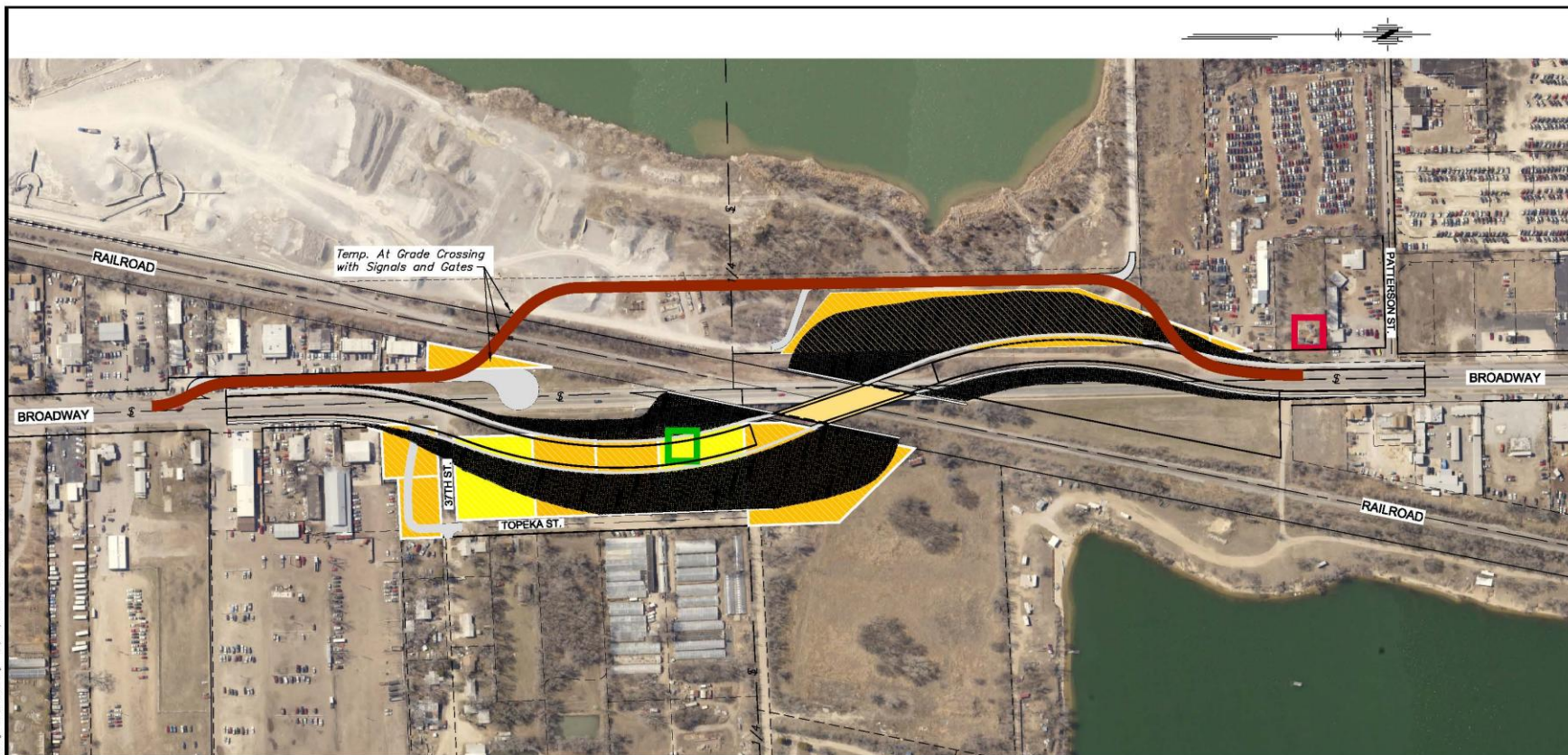
**ESTIMATED COST:**  
CONSTRUCTION: \$11,800,000  
RIGHT-OF-WAY: \$2,800,000  
\$14,600,000

**ESTIMATED BROADWAY CLOSURE TIME:**  
2-3 MONTHS

**WEST ALIGNMENT 'B'**  
Three Span

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-624-9600





- Commercial/Industrial Property Acquisition
- Residential Property Acquisition

- Structure on City Historic Register
- Structure of possible Historic Significance

### ESTIMATED COST:

CONSTRUCTION:	\$11,100,000
RIGHT-OF-WAY:	\$1,200,000
	<b>\$12,300,000</b>

ESTIMATED BROADWAY CLOSURE TIME:  
2-3 MONTHS

**EAST ALIGNMENT 'A'**  
With At-Grade Detour

**MKEC**  
ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316 - 684 - 9600



**BROADWAY BRIDGE AT 34TH STREET SOUTH**  
**CONCEPT DESIGN: CONSTRUCTION COST ESTIMATE**

MKEC ENGINEERING CONSULTANTS, INC.  
 January 11, 2011

OPTION	BRIDGE CONSTRUCTION COST	ROADWAY CONSTRUCTION COST	RIGHT-OF-WAY COST	TOTAL PROJECT COSTS	BROADWAY CLOSURE DURATION
<b>Straight Horizontal Alignment Options</b>					
Straight Alignment 'A' - Truss	\$16,000,000.00	\$5,000,000.00	\$1,800,000.00	\$22,800,000.00	11-13 Months
Straight Alignment 'B' - Truss	\$16,000,000.00	\$6,800,000.00	\$1,100,000.00	\$23,900,000.00	13-15 Months
Straight Alignment 'C' - Steel Arch Bridge	\$14,400,000.00	\$5,800,000.00	\$1,200,000.00	\$21,400,000.00	2-3 Months
<b>Curved Horizontal Alignment Options</b>					
East Alignment 'A' - Single Span Bridge	\$4,100,000.00	\$6,000,000.00	\$1,100,000.00	\$11,200,000.00	7-8 Months
East Alignment 'A' - Single Span Bridge - At-Grade Shoofly	\$4,100,000.00	\$7,000,000.00	\$1,200,000.00	\$12,300,000.00	2-3 Months
East Alignment 'B' - Single Span Bridge	\$4,100,000.00	\$6,000,000.00	\$3,100,000.00	\$13,200,000.00	4-5 Months
East Alignment 'B' - Steel Arch Bridge	\$7,200,000.00	\$5,500,000.00	\$3,100,000.00	\$15,800,000.00	4-5 Months
East Alignment 'B' - Three Span Bridge	\$7,500,000.00	\$4,300,000.00	\$3,100,000.00	\$14,900,000.00	4-5 Months
West Alignment 'A' - Single Span Bridge	\$4,100,000.00	\$7,400,000.00	\$2,000,000.00	\$13,500,000.00	7-8 Months
West Alignment 'B' - Single Span Bridge	\$4,100,000.00	\$6,000,000.00	\$4,000,000.00	\$14,100,000.00	2-3 Months
West Alignment 'B' - Steel Arch Bridge	\$7,200,000.00	\$5,500,000.00	\$2,400,000.00	\$15,100,000.00	2-3 Months
West Alignment 'B' - Three Span Bridge	\$7,500,000.00	\$4,300,000.00	\$2,800,000.00	\$14,600,000.00	2-3 Months



# NEXT STEPS

-  **KDOT APPROVAL OF BRIDGE OPTION**
-  **NEED ENVIRONMENTAL CLEARANCE TO BEGIN RIGHT OF WAY ACQUISITION**
-  **FEDERAL FUNDING AVAILABLE FOR RECONSTRUCTION IN 2011-2012**
-  **PROPOSED CONSTRUCTION TO BEGIN EARLY 2012**
-  **DAB III IS SCHEDULED FOR FEBRUARY 9,2011**
-  **RETURN TO CITY COUNCIL FEBRUARY 15,2011**